Report (2005) stood at 10,881.6 billion dollar and 4,326.4 billion dollars respectively. India's GDP was reported to be 598.97 billion dollars during 2003.

(c) and (d) Yes Sir. The Government has been taking cognizance of this potential. The Tenth Plan, therefore, set a higher GDP growth of 8 per cent per annum.

Measures for tackling earthquake and other natural disasters

224. SHRI S. ANBALAGAN: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government propose to undertake preparedness measures for earthquake and other natural disaster on the lines of Tokyo and Los Angels;

(b) if so, the details thereof including cities/areas proposed to be covered under this scheme and the costs involved thereon; and

(c) if not, the reasons therefor?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE **AND** TECHNOLOGY (SHRI KAPIL SIBAL): (a) and (b) The Department of Science & Technology (DST) initiated a number of projects to undertake preparedness measures for earthquake and other natural disasters like cyclones by strengthening the observation network with latest state-of-the-art technology. Action has been initiated to link the seismological stations being maintained and operated by India Meteorological Department (IMD) through VSATs in order to reduce the time required for estimation of earthquake parameters and dissemination of information amongst the designated agencies. A good network of meteorological observatories is operated by IMD covering the entire coastline and islands. A proposal to set up early warning system for tsunamis and storm surges has also recently been approved by Government at a total cost of Rs. 125 Crores. Also, as Earthquake Risk Evaluation Center has been set up with a view to provide inputs for planning and preparedness for earthquake related disaster following the models evolved in context of Indian conditions. In order to micro zone the selected urban centres and assess the seismic hazard an exercise was taken up for Jabalpur regions as a first step. Based on the experience gained, such exercises have also been initiated for a few selected urban centres, namely, Delhi, Guwahati and Bangalore.

In general, cost involved to carry out such studies for a city may vary between Rs. 6 crores to Rs. 15 crores depending upon the area under consideration.

(c) Question does not arise.

Natural Hazard Warning Centre

225. SHRI NANDI YELLAIAH: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government would assure of locating a Natural Hazard Warning Centre and National Hazard Research Centre at Visakhapatnam, for establishing a Tsunami Warning System in view of the various Departments located in Visakhapatnam, namely, IMD office with a Doppler radar, a regional centre of the National Institute for Oceanography, a major Andhra University with an advanced Meteorology and Oceanography subjects with their advanced research Department and with high mountains to prevent damages to Tsunami Warning Systems; and Eastern Naval Command, Naval Science Laboratories, Oceanological Survey of India; and

(b) if not, the reasons therefor?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) and (b) A proposal to set up an Early Warning System for Tsunami and Storm Surges has recently been approved by Government at the total cost of Rs. 125 crores. A centre would be set up at Indian Centre for Ocean Information Services (INCOIS), Hyderabad on a 24+7 basis. The decision to locate the Tsunami Early Warning Centre at INCOIS, Hyderabad was taken as INCOIS has been developed as an Ocean Services Centre, with a view to make optimal utilization of the in-house facilities created at INCOIS including, Satellite Oceanography/Satellite Communication. INCOIS is the primary agency of the Department of Ocean Development and has been providing services like Potential Fishing Zone advisories and ocean state parameters. Visakhapatnam has been identified as one of the locations for setting up of seismic station for real-time monitoring of earthquakes, as a part of Tsunami Warning System to be deployed in Indian Ocean by India Meteorological Department.